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USSR Report

TRANSPORTATION

No. 62

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WEST GERMAN JOURNAL REVIEWS AEROFLOT'S PROBLEMS

Hamburg DER SPIEGEL in German 10 Aug 81 pp 101, 103-105

/Article: "Camping Out at the Airport"/

> /Text/ Aeroflot, the world's biggest airline, does not live up to its promises: its planes do not take off on time and the service is miserable.

It was a warm morning and the sky was clear. The 200 Soviet citizens waiting at Moscow's domestic airport Domodedovo for the morning flight to Khabarovsk were told over the loudspeaker that the departure was delayed-- for meteorological reasons.

By noon, the number of passengers waiting for the Far East flight had increased to more than 1000. Once again, the loudspeaker told them that the Khabarovsk flight was not yet ready to leave-- this time without giving a reason.

By evening, 3,600 passengers for Khabarovsk had assembled in the Domodedovo waiting rooms. The news on Soviet TV informed them that the weather between Moscow and Khabarovsk was as good as before; but still the flight did not leave.

The travelers made themselves comfortable on benches and chairs, on suitcases and valises or prepared to spend the night in the woods surrounding the airport.

But there was no flight to Khabarovsk on the following day, either. On a normal day, there are 18 TU-114's available for this route. By this time, 7,600 passengers were waiting. Airport director Gennadi Andrejev was now telling them over the public address system that the TU-114's would not leave until the next day "for technical reasons."

It was not until the following evening at which time the Khabarovsk crowd had swelled to more than 10,000 that the Moscow-Khabarovsk flights were back in operation again, almost 36 hours behind schedule. Checking all the passengers in took several more weeks.

All this took place in the summer of 1973. At the time, Moscow's LITERARY GAZETTE reported what was behind the "technical reasons." The 18 airplanes were stuck in Khabarovsk without fuel "through an oversight, because of some blunder."

Things have not changed much on Aeroflot since. Time and again, there are hundreds and even thousands of passengers stuck at the airport for hours or days. Recently, an editor of LITERARY GAZETTE reported on one of his experiences with the airline.

He had arrived at Domodedovo with a firm booking on a flight to Tbilisi. Departure was scheduled for 11:50 am. After a number of excuses, those waiting were called to the check-in counter 6 hours later.

"I had no idea why all the other passengers suddenly started running like crazy," he wrote. "I had my ticket, seat No 21 d, all properly booked. I knew my seat was reserved; I could take my time."

But that was a mistake. When the journalist finally got to the counter, he found he was 152d in line and there were only 150 seats on the plane.

"I pleaded and begged; I sobbed; I even tried a little bribe, but finally I began to rant and rave," the journalist related. But then two policemen appeared and told him to stop immediately unless he wished to continue the conversation elsewhere.

"And this is how I found out that a reserved ticket does not mean a thing," he concluded. "If you really want to fly, you have to run and shove and fight like a lion. I will have to remember that for the future."

The editor was lucky at that. Often enough, overbookings are not discovered until all the passengers are aboard or until some person entitled to special treatment arrives at the last moment. Whoever loses out must get off the plane; but his luggage stays on and flies along.

Booking errors of this kind are but a small part of the adventures a passenger on the Soviet state airline is apt to encounter— an airline which beats all the records good and bad.

Boasting a half million employees and some 3,000 aircraft including helicopters (the actual number is a state secret), Aeroflot, founded in 1923, is the largest airline in the world by far. The Soviet ministry of civil aviation, which to all intents and purposes is identical to Aeroflot, is responsible for personnel training, airports, all manner of equipment, hotels— for everything in fact which does not have to do with military aviation.

The airline's flight routes cover almost one million kilometers and include some 3,600 localities in the Soviet Union only 200 of which have concrete runways as well as 107 cities in 87 foreign countries; the newest foreign route goes to Monrovia, Liberia.

Aeroflot carries in excess of 100 million passengers each year, the equivalent of one out of six airline passengers in the world and some 3 million tons of freight and mail. Lufthansa, by comparison, carries 13.7 million passengers and less than a half million tons of freight. A new, twice yearly route from Leningrad to the Soviet Antarctic base of Molodyoshnaya, which uses the turboprop IL-18 D, is likely to be the longest civil aviation route of any country.

Aeroflot not only transports passengers and freight but is also used to bring in the harvest, by the Red Cross, for meteorological flights, to transport prospectors out to the tundras or to transport pipes and building materials to the Arctic Ocean coast, to monitor volcanoes and to look for schools of fish.

Domestic passengers of Aeroflot are charged at one of the lowest rates in the world. A ticket from Moscow to Tashkent about 3,000 kilometers away costs R 56, the equivalent of about DM 170. For that price, Lufthansa will fly you from Hanover to Cologne, a little more than one-tenth the distance. Of course, a Soviet citizen has to pay out more than a week's wages for such a ticket; for a citizen of the FRG, it comes to 2 days wages.

Aeroflot saves on service in the bargain. On flights of up to 3 hours, no food or drink is served other than a much-used plastic cup full of tepid mineral water. Air sickness bags are available on request. Smoking and drinking are prohibited and that includes one's own flask.

On longer flights, bread is served as well as pickles, a piece of sausage, cold meat or cheese or one-eighth of a cold chicken.

Wine, Crimean champagne and caviar are served, if at all, in first class which was instituted 2 years ago on some flights to the Black Sea resorts and which costs just a few rubles more.

All these things are lesser evils. The experienced air traveler in the Soviet Union knows it is best to take enough sandwiches along not so much for the flight itself as for the time before departure.

There is a schedule, to be sure; but as Radio Erevan puts it so succinctly— only in principle. Often enough, the notorious delays on domestic flights add up to days and not just hours. At least during the main travel season in late summer, it may take weeks for a traveler to get going— as for instance in August and September 1980 when faraway Khabarovsk was not alone in having no fuel.

Explanations are rarely given and even if they are, one can tell they are false. Anyone waiting for 9 hours in Bukhara in bright sunshine and being told that his flight is delayed because of fog is no more surprised than if he is delayed in Tbilisi for a day on his way back to Moscow because of a "thunderstorm in the capital" which boasts three large airports, about 100 kilometers apart with a total of five check-in facilities.

Herewith the balance sheet of a foreigner resident in Moscow after about 50 domestic flights totaling some 50,000 kilometers: three flights were just about on time; the remainder was one to 23 hours late.

The real reason for the delays would appear to be that Aeroflot for all its (exclusively Soviet-built) equipment, for all its huge network and the traffic density which has major airports serviced up to a dozen times daily simply cannot handle the load.

The flight schedule is upset time and again because a damaged plane has to be taken out of service; because functionaries or delegations develop a sudden need for transportation; because the foreign routes are given preference in order to augment foreign currency receipts or because a military sortie is flown in Aeroflot air space in Afghanistan— since the civilian airline must subordinate itself to the needs of the air force. It is an important link in the Warsaw Pact defense system (which is what Polish vice premier Rakowski said about the Polish airline Lot as well) and is under the command of air marshal Boris Bugayev.

Aeroflot's flight captains are experienced air force reservists without exception. They carry large caliber revolvers to guard against skyjackings. Their salary comes to R 300 (less than DM 1,000) per month.

If the pilots are officers, the stewardesses earning just under DM 500 a month are like top sergeants who issue commands to the passengers, turn down any and all requests and have on occasion been known to resort to brute force.

Which is what happened to this SPIEGEL correspondent who was mistaken for a Soviet comrade by the stewardess upon departure from Baku one day. As always, a group of foreigners was taken up the gangway ahead of the patiently waiting domestic crowd. This correspondent happened to be wearing a black, wide-brimmed Azerbaijani peaked cap which, in the eyes of the stewardess, downgraded him to the ranks of the ordinary citizenry. A few well-placed jabs in the stomach propelled him to where she thought he belonged when he tried to climb aboard along with the other foreigners.

During the actual flight, the stewardesses belabor the passengers with instructions such as that emergency exits are not to be opened while in the air or with the latest statistics concerning the cities along the way including the number of movie houses or kindergartens, last year's cotton crop figures or still with the information that the city was recently visited by comrade Brezhnev and he had called it a "beautiful place."

As for the passenger's rights on Aeroflot, there is a list of rules and regulations with 23 of the 24 paragraphs commencing with the words "the passenger must" or "the passenger is not permitted to" and only one saying "the passenger may"— he may take along 30 kilograms of baggage on long-distance flights.

This is of particular interest to private vendors from the Caucasus and Uzbekistan who might go to Moscow with two suitcases full of flowers, tomatoes, cucumbers or fruit which they can sell at one of more than two dozen free markets. They can thereby turn a profit in addition to paying for the round-trip flight and a few pleasant days in the capital.

On what date the prospective passenger will fly and where to he is at least supposed to find out on paper; but the date must not be taken all too seriously. And as to when he will be able to make connections, that is anybody's guess.

Firm bookings by domestic air travelers in the Soviet Union can only be made at the point of departure and no sooner than 2 weeks before leaving.

Reservations for connecting flights and return trips can only be made at the point of arrival. And so it is above all those tens of thousands who take out-of-pocket trips to the summer resorts in the south who spend half their vacation trying to make arrangements to get back by pushing and shoving and offering bribes— often enough encountering long delays much to the dismay of their employers.

A new airplane, the Il-86 "Aerobus," the first Soviet wide-body seating 350, is to bring relief on these bottleneck routes.

Like most Soviet jets which are faithful copies of Western aircraft, this particular plane looks much like the European "Airbus." The twin-jet Tu-134 looks like a cross between the Caravelle and the DC-9; the three-jet Tu-154 resembles the Boeing 727 and the Il-62, a long-distance jet with four engines aft,recalls the British VC-10.

The Yak-40 and the more recent Yak-42 are recognizable for their domestic design. Now and again, Western airlines have expressed an interest in these planes which are particularly suited for short-length, unsurfaced runways.

In general, the Soviet jets are considered robust and reliable but they are noisy and use a lot of fuel. But they are having a good deal of trouble with the new, prestigious models.

The Tu-144, which is an almost exact copy of the Franco-British "Concorde" and has therefore been dubbed "Konkordski" by critics, has turned into something of a fiasco. In 1973, one prototype crashed at the Paris Air Show of all places with at least some of the design engineers aboard, and another crashed in the Soviet Union. The regular flights to Alma-Ata were interrupted several times and finally, about a year ago, cancelled altogether without explanation.

The "Aerobus," too, is not what it should be. Completed more than a decade after the Western wide-bodies, it was first supposed to go into service in 1978, then re-scheduled for the 1980 Olympic year and further postponed again and again. As of now, Aeroflot uses the jumbo jet only on the Tashkent route domestically but sells only two-thirds of the space on the aircraft for technical reasons. The first foreign airport to be serviced by the aircraft has been East Berlin since early July.

Western experts believe the engines are at fault which do not develop sufficient thrust although they use a great amount of kerosene fuel and although the Soviet wide-body has four jet engines as against two for the equal-size European Airbus which has no trouble lifting off at all.

Reports of breakdowns cannot be verified, since air mishaps go generally unreported in the Soviet Union unless they occur in an area where they cannot be kept secret or unless there were foreigners aboard. In the seventies, a total of 20 crashes were reported.

Aeroflot planes are almost always full to capacity. It is only the secondary routes in Siberia, the Far East and the Arctic as well as the foreign routes that lower average occupancy to 86 percent— a dream quotient Western airlines cannot even approach.

On international flights, particularly to the Far East, to Latin America and the remote sections of Africa, Aeroflot has been making headway by offering low rates. In order to circumvent IATA regulations, they are offered by special travel agencies as group rates or other arrangements at about 40 percent the normal rate as a rule.

From time to time, this raises some problems. In 1973, Aeroflot was fined $40,000 in the United States for dumping practices. Nonetheless, Sri Lankan families that recently emigrated to West Berlin were magnanimously given tickets at dumping rates by Aeroflot.

German vacationers, who at times waited vainly for their charter aircraft in Sri Lanka —Aeroflot's 'always at your service' slogan notwithstanding— have passed the time by calling the airline "Aeroscrap" or simply by coming up with a slogan of their own: "Aeroflot— only flying is more fun."

9478
CSO: 1826/23

RAILROAD

PAVLOVSKIY DISCUSSES MEANS OF IMPROVING RAILROADS

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 2 Aug 81 p 2

/Discussion between USSR Minister of Railways I. G. Pavlovskiy and electric locomotive operator at the Moscow marshalling yard depot, V. F. Sokolov: "The Present and Future of the Railways: Speed and Comfort"/

> /Text/ During the years of the 10th Five-Year Plan Soviet railroads delivered 18.5 billion tons of cargo to consumers. This exceeds shipments during the 9th Five-Year Plan by more than one tenth. But even such volumes are inadequate for the Soviet economy. This is why the Basic Directions for the Economic and Social Development of the USSR in the Years 1981 Through 1985 and Up Until 1990, which were ratified by the 26th Party Congress, state that "measures must be taken to improve the work of all forms of transport, particularly railroad transport, and to ensure their development in full accordance with the needs of the national economy and the population." The material resources have been allocated for this.
>
> How are the shortcomings in railroad transport being eliminated and what can the railroad workers themselves do to quickly improve the work of the railways and to ensure their further comprehensive development? On the eve of the national railroad workers' holiday, Hero of Socialist Labor electric locomotive operator at the Moscow marshalling yard, V. F. Sokolov, and Hero of Socialist Labor USSR Minister of the Railways, I. G. Pavlovskiy, discussed these questions.

V. F. Sokolov: Ivan Grigor'yevich, during our lifetime it has become a rule that when we celebrate holidays we concentrate our attention on unsolved problems. The railroad workers have quite a few problems. The Basic Directions document requires a significant increase in the freight handling by the railroad during the current five-year plan. An effective way to successfully solve this task is to further increase the weight of trains. Operators at the Moscow marshalling yard take pride in the fact that they were the first in the Soviet Union to begin operating heavy trains. But you know, Ivan Grigor'yevich, that such trains cannot go everywhere - at many railroad stations the tracks cannot accomodate the extra length trains. Increasing the weight of a train by increasing the load of railroad cars in excess of existing norms results in an increase per-axle load and can result in the intensive deterioration of the track. How are we to deal with this dual problem?

I. G. Pavlovskiy: Viktor Fadeyevich, you have touched upon a very important question. During the 26th Party Congress Leonid Il'ich Brezhnev, while emphasizing the serious nature and magnitude of tasks connected with reequipping railroad transport, indicated the need to solve such crucial problems. We must solve them during the 11th Five-Year Plan and subsequent years through a long-term, comprehensive program of transport development.

The ministry has developed specific measures to increase the weight norms of trains. This task will be solved in accordance with two interconnected directions. First, the scientists and specialists have determined the maximum per-axle loads, which ensure the normal and safe operation of the railroad system and the rolling stock. Taking this into consideration active work is being performed on all railroad lines to maximize the use of freight carrying capacity and the capacity of railroad cars within the limits of tolerable per-axle loads. At the same time work is being done to intensify capacity and increase the distance of uncoupled railcar movement on reinforced concrete cross ties, to use thermally hardened rails and to switch to heavy types of ballast. Research and testing of new models of railroad cars and the upper structure of track are continuing to determine the feasibility of increasing per-axle loads to 23 - 25 tons.

Secondly, the five-year plan for the development of railroad transport calls for a great deal of work to be done to lengthen railroad station tracks, which will also play an important role in increasing the weight norms of trains. Secondary tracks are being laid at a rapid rate. And automation and remote control systems are being adopted extensively.

In other words, the problem of increasing the weight of trains is being solved on a comprehensive basis.

Sokolov: Ivan Grigor'yevich, my colleagues and I are convinced that the ministry is very concerned about the fact that such an important indicator of the work of railroad transport as the sector speed is not increasing over the past several years. This is true even though our locomotives are now more powerful and the technical rigging of the railroads is higher.

Pavlovskiy: The sector speed depends upon many factors. You correctly said that the technical rigging of the railroads is increasing. But not as quickly as needed to improve the work of the railroads. In the 10th Five-Year Plan our material-technical base was developed more intensively than in the 9th Five-Year Plan. More than 3,000 kilometers of new lines and nearly 4,000 kilometers of secondary tracks were built and 4,600 kilometers were electrified. The railroad lines received many powerful locomotives, freight and passenger cars and containers. All of this will soon begin to work to raise the sector speed.

But we must soberly evaluate the situation. More than 80 percent of the railcars are loaded and unloaded on the approaches to enterprises and organizations. Due to the poor development of many approaches and the low technical rigging the entire transhipping process is slowed: in some areas of the rail system enormous numbers of excess loaded cars are collecting because of delays in unloading; in other areas there are not enough empty cars to ensure planned loading. The situation is made worse by the inability of the managers of some railroad lines to organize, by the practice of giving preferential treatment to local organizations in allocating empty railroad cars, and the unsatisfactory work of several depots and railroad stations. In the final analysis all of this has led to a reduction in the speed of trains and has had a negative impact on the use of rolling stock - both locomotives and railroad cars. This is why it is especially important that we carefully study and adopt the work experience of the collectives of the railroad enterprises and industrial enterprises of L'vov Oblast on the efficient utilization of railroad cars. This work experience was approved by CPSU Central Committee and it should be emulated on all railroad lines.

In the 11th Five-Year Plan the rates for the development of the material technical base of railroad transport will increase even more. We plan to build 3,600 kilometers of new lines, 5,100 kilometers of secondary tracks and to electrify 6,400 kilometers. We will equip 15,500 kilometers of railways with automatic braking systems and dispatch centralization. Railroad transport will receive many powerful locomotives, mainline electric locomotives and diesel locomotives, shunting and industrial diesel locomotives, 390,000 freight cars and more than 15,000 passenger cars.

All of this together will help to increase the sector speed of train traffic. The collegium of the USSR Ministry of the Railways is systematically studying these questions.

Sokolov: As in any other sector, Comrade Minister, in railroad transport there are quite a few shortcomings which are not the fault of the railroad workers, but which stem from our numerous subcontractors. In your speech to the party congress you talked about some of these. But, we must admit, we have our own problems. For example, there is the problem of our frequent overtime hours. They say that the blame for this rests upon failure to observe traffic schedules. But whose fault is this really?

Pavlovskiy: There can be no two opinions: the strict observation of established work and rest periods of the locomotive brigades is an important condition for organizing the operational work of the railroad lines. At present in leading depots 90 to 95 percent of the freight brigades and nearly all passenger traffic brigades are working according to precise schedules. The ministry and railroad line administrations are working to raise all depots within the system to the level of the leading depots and to maximize the regulation of locomotive traffic. At the same time steps are being taken to improve the technology of train operation and to increase the responsibility of the dispatch operations in fulfilling the traffic scheduling of trains. In connection with this much attention is being given to raising the efficiency of the material incentive system for workers who are involved in train traffic. The advanced experience of the better train dispatchers and their work methods will be disseminated more extensively. In is on this basis that the question having to do with the maximum reduction of overtime and the precies adherence to schedules will be resolved.

Sokolov: Ivan Grigor'yevich, it is probably not just you and I but also the workers of other sectors of the economy who understand that for the railroads to function normally the stability of the collectives is of special importance. There are many questions connected with this, which are joined together as a generalized concept - concern for personnel.

Pavlovskiy: Viktor Fadeyevich, the railroad workers cannot complain about a lack of attention to the work that they are doing. The Communist Party and the Soviet government have passed several important decrees aimed at further raising the material wellbeing of the railroad workers. The wage rates and evaluations have been increased for workers in the leading professions and night differential pay has been doubled. Longevity pay has been introduced for the majority of the railroad workers. In 1980 alone nearly 890 million rubles were paid in bonuses and awards.

Constant concern is devoted to improving housing conditions. For example, during the past five-year plan 7.6 million square meters of housing were built for the railraod workers. All the same, this problem remains unsolved and is particularly acute on the Far Eastern, Transbaykal, West Siberian, Tselina, Sounthern Ural, Azerbaijan and several other railroad lines. Basically through the fault of several construction organizations of the USSR Ministry of Transport Construction, the Ministry of the Railways and other ministries, the assignments for the completion of housing units are regularly being unfulfilled. To eliminate the shortcomings in housing construction, the amounts of which are being increased by nearly one third during the current five-year plan, we are taking steps to strengthen the construction organizations on the railroad lines and to beef up their production-technical base. We are also taking steps to significantly expand the construction of housing using the resources of our own organizations. In addition, there will be cooperative housing construction and private construction using Gosbank loans.

Sokolov: The overwhelming majority of people judge the work of railroad transport on how well passenger trains are organized, the service they receive at the stations and while traveling. In the summer this is especially important. Probably everyone, including we railroad workers want to know what is being done to further improve passenger service.

Pavlovskiy: Conveying passengers is one of the most important aspects of our work. Every day an average of 10 million passengers use intercity and commuter railroad services. For all of them the railroad workers are obliged to create the necessary comfort so that no one suffers from so-called "transport fatigue". Toward this goal the material-technical base of passenger service is being strengthened. More than 200 million rubles are to be spent to develop this base. It is planned to modernize the Kazan', Paveletskiy and Kursk stations in Moscow and to build new stations in Minsk, Tbilisi, Grodno and in other cities. The improved "Ekspress-2" system will replace the "Ekspress-1" system, which has proven its worth but in present conditions is unable to meet the needs of the Moscow junction for the automated sale of tickets for intercity travel. Such systems are to be created in Leningrad, Kiev, Rostov-na-Donu and in Sverdlovsk. The passenger car park is to be supplemented with cars of an improved design with an improved interior equipment. In the 11th Five-Year Plan all basic passenger trains that are in use year around are to be switched to electric heat. For local travel electric trains with an increased carrying capacity and improved passenger saloon cars are being created.

At the same time we are not forgetting that the main role in improving passenger service is played by people - the workers of the various services: ticket sellers and conductors, station keepers and dispatchers, locomotive operators and track installers. On the railroad lines and enterprises there are many exemplarary collectives, which receive the gratitude of passengers. These include the brigades of conductors from these particular trains: "Yuzhnyy Ural", "Latviya", "Belorussiya" and several others. They also include workers in the following stations: Chelyabinsk, Brest, Vladivostok, and Tallim. The experience of these collectives is a good example for all railroad workers. The ministry will constantly adopt leading experience so that the quality of passenger service will steadily improve. The decisions of the 26th Party Congress requires this of us.

8927
CSO: 1829/11

DOBRYK ON UKRAINIAN TRANSPORTATION PROBLEMS

Kiev RADYANS'KA UKRAYINA in Ukrainian 12 Sep 81 p 2

[Article by V. Dobryk, member-elect of Politburo of the Central Committee of the Communist Party of the Ukraine, first secretary of L'vovskiy obkom, Communist Party of the Ukraine]

[Text] Noting the enormous importance of the rational use of transportation, Comrade L. I. Brezhnev at the 26th CPSU Congress called it a key branch of the national economy, with which the solution of all large-scale economic and social problems is inseparably connected. At the congress it was emphasized that the reduction of transportation expenditures is a major state task, the successful solution of which will make it possible to improve the economic effectiveness of all social production.

Life itself persistently requires improvement of organization of the process and control of transportation. A key branch also requires reliable keys, which in capable hands would more rapidly and more widely uncover internal reserves and unused possibilities. This is spoken of in the resolution of the CPSU Central Committee entitled, "On experience in the work of collectives of enterprises of railroad transportation and industry of L'vovskaya Oblast on the efficient use of cars." The complex system for the efficient use of cars, developed and introduced under the leadership of the oblast party organization, interested the transportation workers of the country, and especially the railroaders. An all-union conference-seminar was recently held at L'vov in which the managers of freight services, engineers engaged in the introduction of scientific organization of labor from all the main lines of the country, scientists, superintendents of workshops of the Ministry of Communications and branch trade-union representatives participated. They displayed special interest in the final results which the collective of the L'vovskaya Railroad achieved after the complex system was introduced.

As in 1975, when the development of the said system was started, only 26 percent of the enterprises of the oblast met the established quota of car downtime, whereas last year it was 49 and in the first half of this year 53 percent. Of 55 freight stations of the L'vovskoye division of the L'vovskaya Railroad, and of 397 enterprises of the oblast, 48 stations and 344 enterprises are working in accordance with the new system. The L'vovakaya Railroad embraces a large territory, and so it is especially gratifying that the L'vov units have been supported by the collectives of 139 enterprises of adjacent oblasts and 75 stations of the Ternopol'skoye, Roven'skoye, Ivano-Frankovskoye and Uzhgorodskoye divisions. This made it possible for the railroad to fulfil the transportation plan and improve the operational indicators over last year, putting in order the downtime quota of cars on sidings. In the current year our oblast is fulfilling the transportation plan on the whole, in particular for such very important shipments as coal, oil and ore. Failures of fulfilment of the plan for the realization of production by industrial enterprises through the fault of the railroad have been practically eliminated.

Many indicators can be cited which testify very clearly to the superiority of the complex system. It is most advisable, certainly to emphasize that success in seeking a reliable key to the branch comes as a result of improvement of the economic relations of railroad stations and industrial enterprises, which are constructed on the basis of mutual obligations and responsibilities for the efficient use of the car pool. Contributing to the improvement is the concern of party organizations and their attention to coordination of the efforts of collectives of transportation and enterprises. Under the supervision of the party obkom an accurate analysis has been made of expenditures on the processes of handling cars, primarily on loading operations on the sidings of enterprises. In developing a complex of organizational, technical and economic measures to curtail downtimes and obtain additional loading resources, experience in the development and introduction of a complex system for control of production quality was used.

Each new thing requires experiments and confirmation by practice. For that purpose a group of enterprises and stations was designated at which expenditures were revealed very perceptibly. Among them is the L'vov Bus Plant, the transportation of which was in a neglected state.

"And that's how it continued until 1975," said B. Samoriz, chief of the transport shop of the bus-builders, at a meeting of the oblast party-economic active members. "People worked one shift, basically manual labor prevailed, we had no locomotives or car-unloading equipment. The plant paid the railroad large fines."

To this it should be added that the workers of the enterprises had disputes with the railroad workers, and it was impossible to put up with such a situation. The plant partkom analyzed the state of affairs in detail, designated specific measures, the times for joint work and those responsible for its execution. Special attention was given to the reinforcement of parts of the transportation shop by qualified personnel. A large contribution was made to the efficient use of cars by communists F. Shatravka, I. Mel'nichuk, V. Zubytashvili, Ya. Savach and S. Chabanovskiy. With the participation of party members and plant and railroad specialists a plan for compact loading of buses was introduced: whereas earlier one car was used per bus, now three machines are arranged on two platforms.

In a short time the siding track was rebuilt, powerful cranes were installed and loading and unloading equipment and mechanisms were acquired. A more progressive technology and organization of work were used. The party organizations of the bus-builders and railroad workers organized active competitions of collectives. A complex of measures is used for the moral and material encouragement of people in the efficient use of cars. More important is the fact that clearly prepared mutual information contributes to the reinforcement of coordination and interactions of plant production men and workers of the Persenkovka station. In the transportation shops they have formed party, trade-union and Komsomol organizations which have concentrated their efforts on intensification of educational work, reinforcement of labor discipline and mobilization of workers in a search for deep reserves. Now on account of reduction of transportation expenses the bus plant has a saving of almost 2.5 million rubles a year, and the railroaders of the Persenkova station in the last 4 years have shipped almost 85,000 tons of additional freight on account of the saving of car resources.

I dwell in detail on experience in the construction of transportation affairs because it became an example for many enterprises of the oblast. The party gorkoms and raykoms and the primary party organizations have everywhere reinforced monitoring of the development and realization of outlined measures. At many enterprises and in the transportation shops, shop party organizations and party groups have been formed. The economic organs and praty organizations of the L'vovskoye division of the railroad and the stations have helped the enterprises of industry to reinforce the transportation shops with railroad specialists, and above all communists.

The Drogobychskiy, Chervonogradskiy, Stryyskiy and Samborskiy gorkoms, the Zaliznichnyy raykom and the L'vovskiy, Nikolayevskiy and Zhidachovskiy raykoms of the party are studying problems in the efficient use of transportation equipment according to plan and purposefully. The question regarding the development and introduction of the complex system for the efficient use of cars remains constantly at the center of attention of the bureau and secretariat of the party obkom. With the goal of unifying efforts for the better use of rolling stock, at 14 decisive loading stations of the oblast a number of secretaries of the primary party organizations of enterprises of industry and rail and motor-vehicle transportation have been created, and the Stryyskiy, Samborskiy and L'vovskiy main partkoms are functioning. In 260 primary party organizations of L'vovskaya Oblast commissions have been elected to monitor the activity of the administration in the rational use of transportation equipment. To accomplish leadership, render assistance and monitor the course of the development and introduction of the complex system a staff functions under the administration of the L'vovskaya Railroad, and at all divisions of the railroad, coordination groups in which the communists play the leading role.

Where the communists undertake matters, success is assured more rapidly. The important thing is that their initiative has been noted and sustained, has been generalized in experience and expanded. At the start of the Tenth Five-Year Plan the collective of the brigade of the Drogobychskiy oil refinery, headed by CPSU member V. Shkrebta, decided to work under the slogan: "No above-quota downtime of cars." This initiative was embraced by the Drogobychskiy gorkom of the party and supported at other enterprises of the city. The enthusiasts understood that the set goals would not be achieved with obsolete methods of organization of loading and unloading work. Thus quite rapidly the collective arrived at the complex system of efficient use of cars. The standards envisage a clear interaction between the railroad workers and the collectives of enterprises and their mutual responsibility for accelerating the turnover of rolling stock. In the first half of this year at the Drogobych and Stebnik stations more than 12,000 car-hours were saved, more than 500 cars were released with which more than 50,000 tons of national economic shipments above the plan were transported. The party gorkom and its economic council have generalized the experience of the best collectives and are issuing a special poster.

The level of efficiency of use depends to a great degree on the efficiency of work of truckers engaged in hauling freight from railroad stations. In the oblast a coordination group also has been formed and is functioning; it monitors the execution of agreed-upon measures in freight handling. These matters are reviewed quarterly at a meeting of the oblast staff with the participation of responsible workers of the party organs, committees of popular inspection with invited freight receivers and shippers. The council of secretaries of primary party organizations of truck enterprises has positively recommended itself; once or twice a quarter it reviews urgent questions of the life and activity of trucking collectives and produces a joint directivity of party and political work. All this made it possible to increase the efficiency of the use of trucks.

In the past Five-Year Plan the above-standard downtime of trucks at the stations of L'vovskaya Oblast has been reduced by 60 percent and freight costs by 8 percent. However, on the junction of the main-line, industrial and truck transportation, in the organization of their interactions are still concealed large reserves for increase of the working efficiency of the main conveyer of the country--railroad transportation. It is very important that since 1977 joint efforts have been conducted by seven party obkoms on the coordination and rendering of assistance to the collective of the L'vovskaya main line in fulfilling the plans for shipments and capital construction, and since 1980 the council of secretaries of party obkoms has been functioning.

Experience in the development and introduction of the complex system shows that the main thing is to prepare people for work under new conditions. Needed here in particular are exactingness and insistence of party organizations. Then people will produce the same qualities in themselves. Here is an example. The partkom of the L'vov insulator plant established strict monitoring of the use of cars. Every day information arrives on each car. When any car has downtime the shop chief indicates in a special report the reason for the downtime and those responsible. That system at first was not well liked by the railroad shop managers. They complained that it took up their time and hindered them in their work. But after a short time the comrades were convinced that the complex system was not a hindrance, but a help in working efficiently.

In all party organizations of the oblast they are becoming aware that much can be done to implement the resolution of the CPSU Central Committee. The bureau and secretariat of the party obkom are listening attentively to each proposal, bit of advice and observation. At meetings of the oblast party-economic active members they discussed the fact that the enterprises of Leninskiy district of L'vov, and also of Pustomytovskiy, Busskiy, Zolochevskiy and Kamensko-Bugskiy rayons have reserves in the efficient use of cars. It was emphasized that it is important to entrust shipments for short distances to truck transportation and not to overload cars. Thus, it was revealed that the L'vov Production Association "Svitoch" has frequently shipped its product, pastry, in railroad cars a distance of 30-40 kilometers. One absolutely cannot put up with such actions.

The party gorkoms and raykoms of the L'vov area, critically analyzing affairs in the cities, are using measures to decisively improve the work of rail and truck transportation. In doing so, special attention is turned toward building up the transport possibilities of the railroad and the development of transportation shops of enterprises and organizations. The party organizations have organized everywhere penetrating studies of the resolution of the CPSU Central Committee and the principles of the complex system for the efficient use of cars. For it is precisely those which will give reliable keys for a key branch of the national economy.

2174
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RAILROAD

WAGE INCENTIVES USED TO ENCOURAGE FORMATION OF LONGER, HEAVIER TRAINS

Moscow ELEKTRICHESKAYA I TEPLOVOZNAYA TYAGA in Russian No 7, Jul 81 p 18

[Article: "Readers Respond to Article on Longer and Heavier Trains". Follow-up to previously published article on the use of longer, heavier trains; for original article see JPRS 77339, 6 Feb 81, pp 33-39.]

> [Text] The initiative of the collective of the Moscow Railroad in forming longer and heavier trains has been greeted in a business-like manner at the Astrakhan' division of the Volga Railroad. The workers and engineering and technical workers at the Verkhniy Baskunchak and Astrakhan' II stations have teamed up with the train dispatchers, railroad car workers and workers from other services to develop and adopt a system for organizing the movement of trains which are twice as long and heavy by using a single diesel locomotive of the 2TE10V series.
>
> In order for trains weighing 6,000 tons to travel in both directions on the entire Astrakhan' to Anisovka run, the switching relays have been replaced and the tracks extended at the Pallasovka and Urbakh railroad stations. Thus, four years ago on the Verkhniy Baskunchak to Astrakhan' run - a distance of nearly 250 kilometers - freight trains weighing 6,000 tons for the first time ever travelled on the Volga Railroad. This new and labor intensive transaction was not assimilated easily. They learned to master the formation and preparation of heavy trains and now it is a routine matter for the majority of the locomotive brigades, the dispatchers, the railroad car workers, the railway engineers, and the workers at intermediary and terminal railroad stations.
>
> Upon entering the competition to implement the decisions of the 26th Party Congress, the Astrakhan' railroad workers made increased pledges: before the end of the first year of the 11th Five-Year Plan to form no less than 18,000 longer and heavier trains. The collective of the division is successfully fulfilling the pledges that they made: within a five-month period they formed more than 11,500 such trains, in which they shipped an additional 10.5 million tons of national economic cargoes and saved almost one half million rubles.

In continuing the discussion of F. Ye. Ovchinnikov's article "Heavier and Longer Trains", which appeared in ELEKTRICHESKAYA I TEPLOVOZNAYA TYAGA, No 12 1980, we are now publishing information from the chief of the department of labor, wages and safety of the Astrakhan' division of the Volga Railroad, N. I. Bozrikova, concerning the use of wage incentives to encourage the formation, movement and driving of heavier and longer trains.

The material incentive of workers who participate in the formation and movement of heavier and longer trains is done on the basis of the Statute governing the awarding of bonuses, which was drawn up within the railroad division and coordinated with the rayprofsozh /regional committee of the trade union of railroad transport workers/. For driving a train that is twice the normal weight the operator and his assistant are paid a bonus equal to 40 percent of their piece-plus-bonus wage. A mandatory condition for the locomotive brigade is that the technical speed be fulfilled.

Train marshallers, the operators of shunting diesel locomotives, and duty officers at the Astrakhan' II and Verkhniy Baskunchak railroad stations, inspectors, automatic machinery workers, junction and train dispatchers, and dispatchers at the division receive a bonus equal to one ruble for each train that is dispatched without delay. The train dispatcher receives this amount for each train that he follows when there are no violations in the work schedules of the locomotive brigades.

The bonus is paid to the workers from the wage fund; engineering and technical workers receive their bonuses from the material incentive fund. The size of the bonus can be reduced partially or completely for waste and for violations in the movement of the long train. When two work shifts handle such a train the bonus is shared equally.

In considering the work experience of the Moscow Railroad, in the second half of 1979 the "Statutes governing the awarding of bonuses for the formation, forwarding and driving heavy trains" were drawn up for the locomotive brigades, the Verkhniy Baskunchak and Astrakhan' depots, and the dispatch office. The diesel locomotive operators of freight trains are paid a bonus equal to 25 copecks for each 100 tons of cargo that is transported in excess of the schedule; the assistant operator receives 20 copecks.

Thus, an operator's bonus for a month amounts to 18 to 22 rubles and the assistant operator's bonus is 12 to 15 rubles per month. At the Pallasovka depot the size of the bonus is not established for each 100 tons of cargo, but for each heavy train: the diesel locomotive operator receives three rubles for each train weighing 3,500 to 4,000 tons, 3 rubles 25 copecks for a train weighing 4,000 to 4,500 tons, 3 rubles 50 copecks for a train weighing 4,500 to 5,000 tons, 3 rubles 75 copecks for a train weighing 5,000 to 5,500 tons, and 4 rubles for trains weighing more than 6,000 tons. The assistant operator receives a minimum bonus of 2 rubles per train and a maximum of 3 rubles. His bonus ranges from 18 to 25 rubles per month.

The problems outlined in F. Ye. Ovchinnikov's article concerning the formation, releasing and driving of heavier and longer trains were also encountered at the railroad stations and sectors of the Astrakhan' division. In our opinion, the article correctly and interestingly stated the problem of calculating the optimal weight of a train. The skilfull calculation will provide the opportunity to consider the nature of the job in heavy operational use.

I feel that when encouraging the formation, releasing and passage of heavier and longer trains it is not necessary to create a special fund for bonuses. This bonus should be paid to the engineering and technical workers and workers from the wage fund and not from the material incentive fund.

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8927
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OCEAN AND RIVER

FINNISH PRESS: LENINGRAD PORT HAS HAULING CAPACITY SHORTAGE

Helsinki HELSINGIN SANOMAT in Finnish 21 Sep 81 p 12

[Text] The Finnish dry cargo ship FINNBEAVER has had to stay in the harbor of Leningrad for over 1 month. For a large part of this time the men of this ship have been without radio or telephone contact with their home country.

FINNBEAVER is already the second Finnlines ship without a few months that has had to stay in Leningrad for a long time waiting to be loaded. In the beginning of the summer the shipping company's FINNTIMBER ship had to stay in Leningrad for a couple of months. The reason for the long waiting times is the low hauling capacity of the Leningrad harbor. FINNBEAVER had to lie at anchor in the roadstead for over 2 weeks before it received a mooring place. The grain cargo that the ship had brought from South Africa was postponed twice in the 2 weeks. The slowness of the unloading is above all caused by the rail car shortage in the entire Soviet Union. "FINNBEAVER will go out to sea again in the beginning of this week," promises operations chief Bengt Andersson of Finnlines. According to Andersson, the ones who have complained the most about the long time that FINNBEAVER had to stay in the harbor, were above all the relatives of the sailors, who were not able to be in touch with the ship.

"The sailor's profession is, however, such that this kind of situation is quite common. The long times to wait in Leningrad are in no way exceptional compared to many other harbors", says Bengt Andersson. For the ship, the most difficult thing was particularly to lie at anchor in the roadstead, because it is not possible to make radio calls from a ship that is within the territory of the foreign country. The crew of a ship that is at a dock can go on shore to call home.

FINNBEAVER is time-chartered to the Soviet chartering firm of Sovfrakht. The number of the ships crew is 28. The crew was changed at the beginning of the trip off the coast of Denmark over a month ago and the crew will again be changed in Denmakr at the end of this week.

9662
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PROBLEMS OF CONTAINERIZATION EXAMINED

Moscow MORSKOY FLOT in Russian No 8, Aug 81 pp 12-13

[Article by N. Kleyman, chief of the line department of the Far Eastern Steamship Company: "The Problems of an Exchange of Containers"]

[Text] The Regulation on the Mutual Use of Containers which is now in effect and which is the guideline in the process of exchange for the steamship companies of the Ministry of the Maritime Fleet cannot, in our opinion, be effectively used until the conditions for the accomplishment of the tasks toward which it is directed are created.

The reasons, technical and organizational, for which steamship companies often unwillingly make use of exchanges are the following.

First, the unequal technical condition of the containers being exchanged, which is potentially fraught with large expenditures for repairs. In addition, the writing up of the transfer of containers from the system of one steamship company into the system of another is performed in a purely formal manner, without a careful registration of the actual damage which a container might have at the moment of the exchange. For this reason, the expenditures for the repairs of damage which are not registered at the time of the shift of the container can be put to the account of the new owner (or user). The writing up of the transfer of containers from the system of one steamship company to the system of another should be performed, in our opinion, by authorized representatives of the steamship company (this is the most preferable variant), or by representatives of specialized firms (surveyor company types) or commission of the steamship companies. In recent years the network of such companies is becoming very widespread in the basic container ports of the world.

Secondly, the low probability of the return of containers into the system of a specific steamship company and, as a result of this, the impossibility of planning capital repairs properly, which inevitably gives rise to premature decommissioning.

For example, on 1 January 1980 the Far Eastern Steamship Company possessed containers that were six years old, moreover, 80 percent of the container pool had been commissioned during the period from 1976 through 1979. For this reason, it was natural that the steamship company desired to obtain in exchange containers of the same age and technical condition so as to decrease its expenditures connected with repairs.

Thirdly, the probability of the emergence of a shortage of containers in the system as a result of the fact that it is not always possible to make an equal exchange at a given time.

But the most serious shortcoming of the present system of container exchange is, however, the fact that as a result of its intensive use the entire container pool of the branch can become completely unserviceable due to the lack of capital repairs over a period of four-seven years. It is paradoxical, but the idea of exchange which is essentially progressive, actually excludes the possibility of planning and punctually carrying out capital repairs on the container pool of a steamship company--the participant in the exchange operations. To perform capital repairs through the resources of each individual steamship company on all of the containers which come into its system is impossible and senseless, but there is no single program of technical servicing for the container pool.

In this kind of situation showing concern for the technical condition (in terms of capital repairs) of its container pool loses all sense for the individual steamship company, especially if the containers, besides being exchanged among steamship companies, are also exchanged with railroads and come into use on coastal hauls where, because of the imperfect transshipment equipment, damage to the containers is especially frequent and cannot be repaired because there are no repair bases.

The only way out of this situation is the amalgamation of the pools of the different steamship companies with all of the problems of distributing expenditures for rental and repairs, including capital repairs, that follow from this.

Up to a certain time an exchange of the amalgamated container pool which is operated on the lines in GIF [expansion unknown] for containers which participate in coastal hauls is probably inexpedient. The container pool which is operated on the lines should be put in a separate category, painted in a single style, and intelligently marked (which is of considerable importance for advertising transportation services). It should be subjected to capital repairs in accordance with an approved program. This kind of approach to the solution of this problem would be business-like in the full sense of the word.

The process of amalgamating the container pool of the steamship companies is a difficult problem whose basic aspects, from our point of view, are the following. A determination of the actual number of containers being operated by the steamship companies and the establishment of their location and technical condition is not an easy matter. It necessitates a simultaneous (within a single day) census of the steamship company's entire container pool in accordance with the container norms and with the specification of location. Based on the experience of the Far Eastern Steamship Company, in order to obtain more accurate results the census should be performed twice, with a one-week interval.

The determination of the census results has to be concentrated in an information processing center. All of the containers which according to the results of the census are in existence have to be broken down into three categories: the steamship companies' own containers; containers which have been rented on a long term basis and become the property of the steamship companies after the expiration of the rental period; and containers which have been rented on a long term basis and do not become the property of the steamship companies.

The following must also be specified: the name of the leasing company from which the given containers have been rented; the daily rental fee; the type and size of the containers; and the date of its construction (the latter is of great importance for the development of a uniform capital repairs program for the container pool).

The information mass which has been obtained as a result of the census can in principle be used for the organization of a centralized system for keeping track of the amalgamated container pool. The census would make it possible to obtain a list of containers which are in operation which would become the basis for the work of the organization (which could be called "Sovkonteyner") under whose management the amalgamated container pool should be.

All of the contracts (with their payment obligations) which have been concluded by steamship companies through the All-Union "Sovfrakht" Association (on behalf of the steamship companies) have to be rewritten for "Sovkonteyner."

It is also important to work out a methodology for distributing rental expenditures among the steamship companies under which "Sovkonteyner" would collect a rental fee from the steamship companies for all of the containers which have been put at their disposal in the form of an average daily rate for every 20- or 40-foot container, regardless of whether this container is the property of the steamship companies, or has been rented on a long term basis with or without subsequent ownership rights.

In working out and introducing the methodology for the distribution of current and capital repairs expenditures among the steamship companies it is necessary to take account of the fact that in order to pay for the expenditures of "Sovkonteyner" which are connected with the repairs, the rental rate which is collected by it daily from the steamship companies has to be increased somewhat. Funds obtained by "Sovkonteyner" from the rental of temporarily surplus containers could serve as an additional source for financing repair operations.

In developing a uniform capital repairs program for the amalgamated container pool it is also important to consider the following circumstance: A container in good condition which was manufactured several years ago is just as suitable for making freight hauls as a new container; however, the value of the old container is substantially smaller. Therefore, in the practice of the leasing and shipping companies which are the basic owners of the world's container pool it is mandatory to perform capital repairs after a container has been in use four to five years. The cost of the capital repairs usually comes to around one-fourth of the cost of the container; however, after it the container can serve for an additional 8 to 10 years.

On the whole, the work of "Sovkonteyner" would in many respects be similar to the work of a leasing company.

Such, in general terms, are the difficulties connected with the problem of amalgamating the container pool of steamship companies; but its solution would make it possible to use the container pool much more efficiently and, thereby, improve the quality of the work of transportation in organizing freight shipments.

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2959
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DESCRIPTION OF ARCTIC PORT PEVER

Moscow MORSKOY FLOT in Russian No 8, Aug 81 p 41

[Article by B. Abakumov, chief of the port of Pevek, and A. Zelinskiy, chief of the port's division of planning, labor organization, and wages: "Pevek--An Arctic Port"]

[Text] The collective of the Arctic port of Pevek successfully fulfilled its planning assignments for 1980 and for the 10th Five-Year Plan as a whole. The freight processing plan was fulfilled by 112.6 percent, with 51,600 tons of above-plan national economic freight processed. The local fleet shipping plan was fulfilled by 105 percent. The freight processing assignment was fulfilled 10 days ahead of schedule, and the local fleet shipping plan--38 days.

The introduction of new advanced technology and of new improved forms of labor organization at the loading and unloading operations made it possible to raise the level of overall mechanization by .5 percent and labor productivity at freight work by 1.9 percent.

Following the experience of Leningrad transportation workers, for three years now the Pevek port has been the base for the functioning of a continuous schedule plan for the operation of the transportation center which also includes the Pevek motor vehicle base of the output supply enterprise and trade office of the Administration of Workers' Supply. Our supplier enterprises worked out a regulation in the NPGRTU [expansion unknown] and socialist competition conditions. According to the results of the socialist competition between the supplier enterprises during the navigation period, the port occupied first place in July and October 1980.

An overall socialist competition between the collaborator enterprises and ship crews, and also the organization of a contracting method for the work of the dockers made it possible to process 93 percent of the ships ahead of schedule with an overall economy of lay time of more than 3,000 ship-hours. The port received 162,000 rubles in dispatch money for the advance processing of the fleet.

Compared to 1979, in 1980 gross fleet processing intensity increased by 50.4 percent, and specific unproductive idle time (per unit of mass of processed freight) decreased by 37.5 percent.

As a result of measures to improve the efficiency and quality of operations and of a decrease in lay time and losses of working time the port received 142,000 rubles in above-plan profits. The level of total and estimated profitability was reached.

On the basis of the results of the socialist competition for the Fourth Quarter of 1980, the port collective was awarded the third All-Union Monetary Prize, and the port was awarded the Red Challenge Banner of the Far Eastern Steamship Company and Magadan Fleet Basin Committee.

Since 1975 the port has been conducting all of the freight operations with enlarged overall teams. At that time there were five such teams in the pott, each with 24-26 people in them, and one of them specialized in reloading hard coal. In subsequent years larger teams began to be created (50-60 people). In 1979, as an experiment, a cost accounting enlarged overall team numbering 120 people was created in the port. However, as experience has shown, the most efficient variant for Pevek is the processing of the fleet with three enlarged overall teams; two containing 50 people each for ships with general and timber cargos, while for bulk cargos (coal) a specialized brigade consisting of 25 people is sufficient.

This organization of labor has produced a positive result: compared to 1979, the gross processing intensity of ships containing coal increased by 2.9 times, and the net intensity by 50 percent.

Since 1974 the enlarged overall teams have been led by stevedore-team leaders. They are at the same time the producers of work and the leaders of teams. This made it possible to reduce the staff of stevedores, make more efficient and qualitative use of labor resources and reloading equipment, and carry out the leadership of the team.

An improvement of the quality of processing freight, an increase in labor productivity, a decrease in fleet and truck processing time, a decrease in the cost of freight processing, and an increase in the material interest of the members of the team makes brigade contracting the most progressive form of the organization of the production process. Thus, in 1980,80 percent of the ships were processed by the team contracting method.

In every year of the 10th Five-Year Plan in the port a calendar plan for reviewing the loading and unloading work norms was worked out and introduced. This made it possible to substantially decrease labor intensiveness at freight operations and to obtain an economic effect of 11,000 rubles during the five-year period. The results of the socialist competition were announced monthly, quarterly, and for the year as a whole. Challenge banners and testimonials were presented in festive circumstances at meetings of the collectives.

During the 1980 navigation period the port continued its work to improve the continuous schedule plan of the transportation center.

We attribute great importance to the competition for the title "Best In My Profession" which helps to spread advanced experience. This honored title was bestowed upon 17 specialists in this competition.

In the movement for a communist attitude toward labor there are 230 participants in the port and 78 workers have been awarded the title of Shock Worker of Communist Labor. The honored title of Collective of Communist Labor was awarded to the crews of the tugs "Kapitan Beringov" and "Komsomolets."

The program of economic and social development for the USSR during the next decade which was adopted by the 26th CPSU Congress provides for a further increase in the capacity of maritime ports.

A new pier, two warehouses, and production workshops will have to be built in Pevek, and the port will have to be outfitted with additional reloading equipment and floating equipment.

In addition, it is planned to substantially improve the social living conditions of our Polar workers. Two 64-apartment buildings, a dormitory, a kindergarten, and others will be built.

At the same time, in order to improve the efficiency and quality of the work of the port workers coal has to be brought into Pevek before 1 September, which will make it possible during the most intense months of the navigation period to assign a pier and release a team of dockers for work with general freight; container ships have to be put into processing with an interval of not less than 10 days, and not more than 1,000 20-foot containers should be brought in during a navigation period.

The fulfillment of these conditions will make it possible to avoid unproductive idle time by ships, will ensure rhythmic work during the short Polar summer and, thereby, will make it possible for the port to successfully complete its plan for the first year of the 11th Five-Year Plan.

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2959
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PROBLEMS WITH VEGETABLE AND COAL TRANSPORT

Moscow VODNYY TRANSPORT in Russian 10 Sep 81 p 2

[Article by A. Petrov: "If We Work Together"]

[Excerpts] During the 10th Five-Year Plan the collective of the Moscow Southern Port achieved definite production successes. The amount of hauls increased by 65 percent, labor productivity increased by 35 percent, and fleet processing time decreased by 13 percent.

The credit for these achievements belongs to our innovators, --the chief of the port B. Marisov says. --In recent years quite a few problems connected with unproductive expenditures of manual labor have been solved.

And Boris Petrovich cites concrete examples. The specific nature of the port consists in the diversity of the cargos that it handles--here we have grain, coal, vegetables, unit packed cargos, and so forth. During the 10th Five-Year Plan, for example, the technology of transshipping grain was resolved in a new way. Previously the loading was performed through the doors of the railroad cars, and in order to avoid losses special grain shields had to be set up. This was a toublesome operation and it took a lot of time. But now the cars are loaded through upper hatches. A new bin installation was created for this purpose, and other changes were made in the mechanization scheme. As a result, not only has car loading time decreased, but static loading has increased.

The cleaning of holds which in the past was performed manually has also been mechanized. The all-purpose "Case" and "Clark" loaders which were purchased by the port are very good for this purpose. And now not more than eight people are engaged in unloading grain--it has been possible to release ten workers.

--The central planning and designing office has been giving us a great deal of assistance in mechanizing labor consuming operations, --the chief engineer of the port V. Logachev enters the conversation. --A cooperation contract has been made up and is being carried out. Now, for example, we are looking for a more optimal variant of processing grain with a special screw conveyor. Then the necessity for gantry cranes will vanish.

To tell the truth, not everything is going as smoothly as one would like. In the transshipment of grain there is still an unsolved problem--the movement of the railroad cars. It is a troublesome matter, and the central planning and designing bureau has worked out for this purpose a plan for electric traction which is controlled by an operator from the bin. And so far this is as far as it has gone. The experimental plant of the central planning and designing bureau is going slowly in producing a mechanism, and it does not exist in the enterprise's plan.

There are also difficulties in the processing of coal of which every year around two million tons are delivered by railroad to the port. With the help of the above-mentioned loaders the work of cleaning coal out of the holds has been made easier. Production engineers see the possibility of a further increase in labor productivity of 15 percent. But this requires stowing grab buckets, and the hitch is that as of yet there is not a single mass produced mechanism and, as is known, not a single enterprise plans to produce one.

Recently the workers of the Southern Port took an inventory of all manual operations, trying to draw as many workers as possible into the orbit of a search for the best mechanization varients.

On the initiative of the chief production engineer S. Serbul and the chief of the technology norms bureau V. Bessonov, a semi-automatic tong grapple for moving barrels has been introduced. The chemicals in these barrels arrive in "heavy" vessels--long boats and "esteshks." Unloading the hold used to be a huge job. Now mechanized unloading is conducted with any unadapted vessel.

As another example of a creative attitude toward work one can cite the mechanization of the reloading of bottles containing acid, an operation which is not only labor consuming but also quite dangerous for the health of people. All of these problems were solved during the 10th Five-Year Plan. Today the level of overall mechanization in processing packed unit freight has reached 97 percent, and during the five-year plan it rose by three percent. This would seem to be little, but how many people sighed with relief when at a number of sectors machinery took over a large number of their cares.

--Actually, in the future we will be able to introduce any mechanization schemes, --says the chief engineer. --But this requires a further development of the port. And the facts are that the port is restricted from three sides by the existing construction and it is as if there is nowhere to expand. But if a dam were to be built between the coast and the Nagitin Island, then the pierline would more than double and come to around five kilometers. We already have sketches--now we have to wait for the decision of higher organizations.

An appeal by Kaliningrad port workers calls upon all water transport workers to intensify the search for reserves in accomplishing the task of overall mechanization. For example, the Kaliningrad workers are correctly directing attention to the problems of the packetization of cargos, seeing in this the chief element with the help of which expenditures of manual labor could be substantially decreased. Unfortunately, our Moscow river workers are still not always meeting mutual understanding from cargo shippers. For example, bagged cargo has begun to be received, as the port workers requested, on flat cars; however the weight of the sacks, for example, those containing oatmeal, is 20 kilograms more than what is necessary for the full mechanization of loading. It is important that cargos be formed in packets right at the shipping sites. An enlargement of the cargo unit is an important reserve in the planned eradication of manual labor.

The port leaders spoke with pain in their hearts about the vegetable problem. Colorful photographs of containers for hauling tomatoes and melons which had been designed in the port were spread out fan-like on the table of B.P. Marisov. Ten years ago the first uncomplicated devices of this kind were created. But at the dock is a ship loaded to the top with boxes of tomatoes. The workers carry them one box at a time to the truck. Monotonous, ignoble work. And watermelons? Of 600 tons, as a rule, at best half gets to the stores. There are times when the workers have to put on swamp boots in order to get down into the hold full of watermelon syrup. And the containers still continue to exist as beautiful pictures. However, the discussion of this flagrant mismanagement is not new, but the ministries and the departments upon which the solution of the problem depends have not yet spoken their weighty word.

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MISCELLANEOUS

EXPERIMENTAL MAGNETIC LEVITATION SYSTEM AT RAMENSKOYE

Moscow PRAVDA in Russian 4 Sep 81 p 4

/Article by A. Androshin and S. Goncharov, special correspondents for PRAVDA, Moscow Oblast: "We Report the Details: The Express Trains Learn to Fly"/

> /Text/ The rigging of the experimental sector where the first Soviet express trains are being tested on an electromagnetic suspension began in the Moscow suburb of Ramenskoye. It is here that they have constructed a test range for the All-Union Scientific-Research and Design Institute for Pipeline Container Systems of the USSR Ministry for the Construction of Enterprises for the Petroleum and Gas Industry's Soyuztransprogress.

The elongated railroad car resembling a cigar stands immobile on the edge of the platform. But then it rises a centimeter above the scaffolding. In a minute or so the railroad car slides through the air above a track that guides the "flight" of the apparatus. Wheels are not needed - the railroad car is supported by an electromagnetic field.

A fantasy? Not at all. The plans for such vehicles are even now being prepared by designers. In two years it is planned to test such a railroad car.

Institute specialists began experiments several years ago using permanent magnets. Researchers placed them on the railraod car and along the track. By placing the same magnetic fields facing each other, the magnets repel each other and support the apparatus.

The deputy director of the institute, S. Baybakov, says: "We had to reject this method because a stretch of track extending even a few kilometers would require thousands of permanent magnets. Also, while repelling each other they form the so-called lateral shift effect and can simply throw the train from the scaffolding if additional steps are not taken to stabilize the vehicle. However, as the result of these tests were managed to check many calculations that are required for further experiments. The main thing is to believe in ourselves and in the vehicle intself on the magnetic suspension."

We had a talk with specialists in the testing building, where they are constructing the carriage that can be considered the prototype of future express trains. Powerful electromagnets suspend them in the air. They are fastened to the body and attract the railroad car to the metal strips which extend along both sides of the concrete scaffolding. Automatic equipment regulates the gap between the overpass and the railroad car. Electromagnets ensure the lateral stability of the vehicle by preventing it from transverse displacement.

Workers of the USSR Ministry for the Construction of Enterprises for the Petroleum and Gas Industries at the Ramenskoye test range have recently started work on such a system. The length of the test scaffolding will extend nearly one kilometer. The track begins under the roof of the testing building. Work has been completed here and the carriage, on the platform of which are installed four electromagnets, is ready to be sent along the first section of the overpass.

But what makes it "fly"? In the middle of the track there is one more metal strip. It is thin and made of aluminum and is installed on the edge along the entire bed. It represents a stationary "rotor". The stator coils are fastened beneath the body. When current is fed along the wires that extend along the scaffolding, the railroad car, which is repelled by the magnetic field, rushes along the strip.

The manager of the institute's department, Yu. Sokolov, explains: "Now you are acquainted with the linear electric motor, which conducts the train through the air on a magnetic suspension. All of its basic parts are detailed in a flat plane. Such an unusual electric motor makes high speeds possible."

"What sorts of speeds, for example?"

"At least 350 to 500 kilometers per hour. If the vehicle were put into a pipe, from which all air is removed, it could travel significantly faster. As you can see there are no wheels, which means that there is no cohesion with the rails."

The scientists and engineers of the All-Union Scientific Research Design and Technological Institute of Electric Locomotive Building in Novocherkassk are also working on such express trains for intercity transport. In contrast to their colleagues the specialists of the Moscow Institute are working on another task: creating a passenger electromagnetic system for city and suburban conditions. It is true that the trains will not "fly" as fast in this case. But the average speed of the system will increase in comparison with trolleys, street cars, buses and the subway. Another important aspect is that such express trains will be noiseless, will not bother people who live near the line. We recall that this was one of the reasons why designers rejected the idea of using transport on an air pillow on city streets.

The discussion again returns to the carriage.

Yu. Sokolov continues: "In essence it is already a finished link of the future railroad car. Several such carriages can easily be joined together. Then the bottom of the train will resemble a caterpillar, which bends when passing obstacles. This is why a train on a magnetic suspension will be able to easily overcome sections of track that are uneven. Since the road bed is suspended above the ground, the express trains are not bothered by the changes in weather. By the way, as regards the overpass itself. It is the job of the architects to give it a modern look and to make it fit in with the layout of city blocks. The scaffolding supports are to be installed on the dividing lines of streets and avenues.

However, the creation of such a means of transport is only half of the job. It is necessary to determine the nature of the track and station services of the high-speed systems and to come up with essentially new means of automation and remote control for controlling the overall system. In institute laboratories they are now working intensively on this. On one of the test stands, imitating the future speeds, an aluminum disk revolves and stops almost instantaneously. This is a model of a train on a magnetic suspension. Here they are checking the modes of running and braking and studying possible emergency situations. A controlled linear electric drive is being created, which will provide for the stepless regulation of speed. The engineers of the Moscow Institute are working with specialists from many other organizations in the capitol to solve these problems. They are also working with specialists from Alma-Ata, Kiev, Novosibirsk, Leningrad, and Stavropol'. They are continuously monitoring research that is being done by foreign researchers in the field of creating new modes of transport

The test stand is switched on. The disk begins its run. Now it is only a disk. In time first the carriage, then the new railroad car, and finally the express trains of tomorrow will "fly" above the earth just as smoothly and easily.

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MISCELLANEOUS

EXPERIMENTAL HYDRAULIC TRANSPORTATION SYSTEM BEING TESTED

Moscow PRAVDA in Russian 20 Sep 81 p 2

[Article by B. L'vov, Ramenskoye, Moscow Oblast: "Tests are Underway: Ore Through Pipes"]

> [Text] In the Moscow suburb of Ramenskoye the builders of the USSR Ministry for the Construction of Enterprises for the Petroleum and Gas Industries in cooperation with scientists have erected, tested and put into operation a large laboratory complex of the All-Union Scientific Research and Design Institute "VNIIPItransprogress" - a so-called hydraulic test stand. This stand is being used to conduct research and to develop operating modes for a new kind of pipeline transport - the hydraulic transport of solid materials.

Among the building being constructed and already completed for the institute is a building with the laconic inscription "hydrostand". From inside this stand dark blue, red, blue and white pipelines extend out for several dozens of meters. The pipelines are interwoven. Remote control sensors vigilantly watch over the entire system. Aleksandr Konstantinovich Asin, the chief of the hydrostand, reports:

"The analyzing-control complex can simultaneously monitor information from the measuring systems on 128 channels and maintain control over the executive mechanisms on 64 channels. It has been estimated that the hydrotransport of, say, coal from the Kuznetsk Basin and processed products from the Kansk-Achinsk coal to the Urals and to the European portion of the Soviet Union will make it possible in the future to reduce the burden on the railroad network by 60 to 85 million tons in just one year.

"The first experimental-industrial mainline - a coal pipeline from the Inskaya mine near the city of Belovo to the TETs-5 in Novosibirsk, a distance of 250 kilometers and a productivity of 4.3 million tons of coal per year - is to be built before 1984. The organizations of four ministries - Construction of Enterprises for the Petroleum and Gas Industries, Instrument Building and Means of Automation and Control Systems, Power and Electrification, and the Coal Industry - have completed the design work for this hydrosystem.

The use of pipelines for transporting ore concentrates promises to yield large savings. There is already experience in the construction of such mainlines. A thirty-kilometer pulp pipeline for transporting copper and nickel concentrates has already been put into operation in Noril'sk. Work is coming to an end on a hydro-transport system for the delivery of 6.5 million tons per year of iron ore concentrates from the Lebedinskiy mining and enrichment combine to the Oskol'skiy electrometallurgical combine in Belgorod Oblast.

Preliminary estimates indicate that in the next ten years it will be possible to transfer 50 to 70 million tons per year of ore concentrates and chemical products from railroad transport to pipeline hydro-transport.

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MISCELLANEOUS

PNEUMATIC TRASH REMOVAL SYSTEM

Moscow MOSKOVSKAYA PRAVDA in Russian 19 Sep 81 p 3

/Article: "Already a Reality: Pipe-Road"7

> /Text7 Tuesday, 15 September. NIiPI specialists on the general plan have started drafting a city blueprint for the development of a pneumatic transport system.

A pipe. You will say that it is an invention as far as you are concerned. We have known about pipes for ages. And you will be correct. But the well-known pipe is starting a new career.

Chertanovo-Severnoye. An experimental region. Many new design features have been incorporated in its draft. One of them is a large cube made of glass and concrete; it has been erected quite near the apartment buildings. This is a pneumatic trash removal system. The final touches have just been completed. The station is not yet in operation, but we can visit it.

Powerful compressors have been installed in the building. Pipes extend from the compressors. If we were able to look through the ground we would see that from each approach to each of the apartment buildings pipes with a diameter of nearly one half meter lead out. When the compressors are in operation, trash will be fed through the pipes to the station, where the wastes are compacted and conveyed to enterprises where they are burned in the form of briquettes. How many people will be relieved of this heavy, unpleasant task! How many vehicles can be used for other purposes!

The air pressure, created by the powerful compressors, can, it turns out, move trains with cars, each of which weighs as much as 5 tons. For this purpose rails are laid in the pipes. A train travels through the pipes (the speed of the train can be as much as 60 kilometers per hour) to its destination. There is one more advantage to the pneumatic transport system - it is child's play for it to deal with barriers and for this reason it has the shortest travelling distance. There is no need to wait for unloading - everything is done automatically. Being aware of these qualities of the new form of transport, Moscow planners are now evaluating the possiblity of constructing pipelines for the delivery of non-metallic materials to the city, including such things as sand, cement and gravel. And a great deal of these products are needed for the rapidly developing city.

By the way, although the work of the GlavAPU /Main Architechtural and Planning Administration/ specialists is only beginning, there are already other organizations planning to make use of pneumatic transport. First of all the housing complexes want them. Just as soon as the Chertanovo-Severnoye station is completed work will start on a pneumatic trash removal station at Krylatskoye. Later such new facilities will begin appearing in all large housing projects, which are to be built in the current five-year plan.

There are other customers as well. Including, for example, the State Library imeni V. I. Lenin, where a pneumatic transport system will affect yet another profession - that of librarian. At the Transprogress Special Design Bureau they have already designed equipment for the pneumatic container delivery of books. At present in order to obtain certain literature one must wait for 20 to 40 minutes, while it is retreived from the stacks. The new system will reduce the wait to one minute. In the building of the Soviet Union's best library they will install nearly five kilometers of pipes. By the way the pipes will not be round, but rectangular - the shape of the books. It is planned to equip all of Moscow's large libraries and institutions with such a pneumatic delivery system.

There is much work to be done in the future. The blueprint for the development of pneumatic transport (briefly, it is being created simultaneously with a common program for the development of Moscow's transport system) will be completed in two years.

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